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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/724,873	12/02/2003	Shinji Kurihara	16359-003001 / 702/SM	1578

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EXAMINER

PSITOS, ARISTOTELIS M

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 04/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/724,873	Applicant(s) KURIHARA, SHINJI	
	Examiner Aristotelis M. Psitos	Art Unit 2627	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 November 2004.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 and 13-16 is/are rejected.
- 7) ☒ Claim(s) 11 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 September 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Priority

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

The IDS of 11/09/04 has been received and made of record.

Specification

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

Claims 11 and 12 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim 11 or 12 cannot depend upon a multiple dependent claim (8 or 9). See MPEP § 608.01(n). Accordingly, the claims 11 and 12 have not been further treated on the merits.

With respect to claim 13, it is interpreted as attempting to define the method of apparatus claim 1. However, line 2 of this claim should recite " --- outputting a 180 degree odd multiple --- in order to agree with the operation of the apparatus as well as the claim language.

Claim 10 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Dependent claim 10 recites a desired function, however, such a function not only fails to follow from the structure of elements positively recited, but also attempts to alter the scope of the invention from that of a subcombination to a combination and hence is in improper form/format in accordance with present USPTO practice. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1, 4, 8/4 and 13 are rejected under 35 U.S.C. 102(b) as being anticipated by Lampel.

The following analysis is made:

Claim 1

Lampel

A noise removal circuit comprising:

see figure 1

a 180 degree odd multiple shifting section for

section 109

outputting an 180 degree shifted signal that is

phase-shifted from an input signal by an odd multiple

of 180 degrees; and

a difference output section for outputting a

section 101

difference between the input signal and the 180 degree

shifted signal.

As analyzed above, the elements positively recited are met by the above elements in figure 1 of Lampel.

With respect to claim 4, such limitation is present in the above system of Lampel.

With respect to claim 8/4, such is present, i.e., a pll.

Method limitations as present in claim 13 are met when the above system operates.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
 2. Ascertaining the differences between the prior art and the claims at issue.
 3. Resolving the level of ordinary skill in the pertinent art.
 4. Considering objective evidence present in the application indicating obviousness or nonobviousness.
2. Claims 2, 6, 8/6, 14 and 16/14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lampel further considered with Kuroda.

With respect to claim 2, this differs from claim 1 in that it requires a 360-degree phase shifting section.

Lampel discloses a 180 degree shifting section, nevertheless, as further taught in this environment by Kuroda et al – see the description of the wobble detection and use thereof for the appropriate spindle driver and subsequent signal decoding capabilities, his sixth embodiment – commencing at col. 11 line 1, expands upon such to include multiples of 360 degrees.

It would have been obvious to modify the base system of Lampel with the above teaching motivation is to correct for such environment errors as recognized by Kuroda et al.

The limitations of claim 6 and 8/6 are analyzed as stated above with respect to dependent claims 4 and 8/4, i.e., they are the same limitations but now dependent upon claim 2.

With respect to method claim 14, such is met when the above system operates. With respect to claim 16, such is present in the Kuroda et al system.

3. Claims 3, 5, 7, 8/5-7, 15 and 16/15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lampel considered with Kuroda et al and all further considered with Konishi.

Claim 3 follows claims 1 and 2, i.e., it includes both a 180-degree odd multiple shifting section and a 360-degree shifting section.

The above combined systems – see the analysis of both paragraphs 1 & 2 provided for the 180 degree odd multiple shifting section and the 360-degree shifting section separately.

Konishi teaches in this environment the ability of serially connecting a first and second loop filter so as to control the clock signal in the optical environment.

It would have been obvious to modify the system of Lampel & Kuroda et al with the above overall teaching from Konishi – serial connection of loop sections, in order to adjust the frequency/phase of the clock signal as recognized – see abstract for instance – in Konishi.

The limitations of method claims 15 and 16/15 are met when the above combined system operates, while the limitations of dependent claims 5,7,8/5-7 are present as discussed above with respect to dependent claims 6 and 8/6.

4. Claims 9/4-7 are rejected under 35 U.S.C. 103(a) as being obvious over the art as applied to claims 1-4 above further considered with Wang et al.

The limitation present herein introduces a dll capability for the pll.

Wang et al – see abstract for instance teaches the ability of having such circuit arrangements in order to yield a programmable pll suited for use with programmable logic.

It would have been obvious to modify the base system as discussed above in paragraphs 1-3 with the additional teaching from Wang et al, motivation is to modernize the overall pll system by use of dll elements for programmable logic and hence take advantage of newer ic circuitry.

Although no rejection on art has been present with respect to claim 10, it is considered present in the Kuroda reference.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aristotelis M. Psitos whose telephone number is (571) 272-7594. The examiner can normally be reached on M-F: 6:00 - 2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dwayne D. Bost can be reached on (571) 272-7023. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

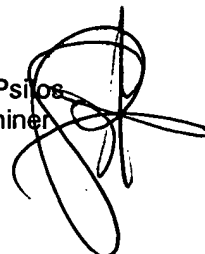
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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Aristotelis M Psilos
Primary Examiner
Art Unit 2627



AMP